

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 11/630,159. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the claimed limitations recited in the present application are transparently found in the copending application 11/630,159 with obvious wording variations. Take an example of comparing claim 1 of pending application and claims 1 of copending application 11/630,159:

Pending Application 10/555,107	Co-pending application 11/630,159
1. A method for controlling power consumption in <u>a wireless short-range communication terminal</u> having at least two different power states, the method	1. A method for controlling <u>a short-range wireless terminal</u> capable of operating in a first <u>beacon-based</u> network and in a second beacon-based network, the method

<p>comprising the steps of: <u>receiving beacon</u> frames at beacon intervals; extracting beacon interval information from a beacon frame; monitoring the data traffic of the terminal; defining at least one parameter describing the data traffic; and based on said at least one parameter and the beacon interval information, dynamically controlling <u>the power state of the terminal</u> so that the terminal is maintained in one of at least <u>two power states</u>, wherein a first <u>power state</u> is an active state and a second <u>power state</u> is a <u>power save state</u>.</p>	<p>comprising the steps of: controlling the <u>short-range wireless terminal</u> to <u>enter a power save state</u> with respect to a <u>first beacon-based network</u>; and starting operation in a second beacon-based network in response to the controlling step, wherein the controlling step is performed if the short-range wireless terminal is in an <u>active operation state</u> with respect to the first beacon-based network when the operation in the second beacon-based network is to be started.</p>
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The claims of the application 11/630,159 encompass the same subject matter except the instant application **"A method for controlling power consumption in a wireless short-range communication terminal having at least two different power states"** whereas the copending Application 11/630,159 claims are to **"A method for controlling a short-range wireless terminal capable of operating in a first beacon-based network and in a second beacon-based network"**. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to implement the copending Application 11/630,159 **"A method for controlling a short-range wireless terminal capable of operating in a first beacon-based network and in a second beacon-based network"** as a **"A method for controlling power consumption in a wireless short-range communication terminal having at least two different power states"** because it was notoriously well known to utilize method and or a system of saving power in a wireless network comprising an access point, one or more stations, utilizing beacon frame, and an algorithm for calculating a transmission time T of downlink data for the stations by calculating the transmission time of data to be downlinked to the stations using the algorithm, determining a priority queue ordering of the transmissions based on the time calculated for each station, scheduling an awakening time in the frame for each PS station based on the transmission order.

Further, the instant claims obviously encompass the claimed invention of 11/630,159 application and differ only in terminology. To the extent that the instant claims are broaden and therefore generic to the claimed invention of 11/630,159 application, in re Goodman 29 USPQ 2d 2010 CAFC 1993, states that a generic claim cannot be issued without a terminal disclaimer, if a species claim has been previously been claimed in a co-pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Liu (U.S. Pub. No.: 2004/0190467 A1).

With respect to claim 1, 10, 14, Liu teaches A short-range wireless communication system (See Liu e.g. WLAN network of Fig. 1, Page 1, ¶ [0008]) or A wireless terminal (See Liu e.g. STA, mobile or portable, Page 1, Lines 1-5 of ¶ [0005]) and or A method for controlling power consumption in a wireless short-range communication terminal (See Liu e.g. ad-hic mode, , 802.11, WLAN, Page 1, ¶ [0006]) having at least two different power states (See Liu e.g. employing power saving technique, Page 2, ¶ [0019], power saving, sleep and awaking (or active state or mode), Page 3, ¶ [0030]), the method comprising the steps of: receiving beacon frames at beacon intervals (See Liu e.g. exchange message (beacon at fixed interval), station listens for beacon message, or station receives beacon frame (or message), Page 1, ¶ [0013]); extracting beacon interval information from a beacon frame (See Liu e.g. data received,

extracted, beacon, 140b, TIM, schedule information, Page 3, Lines 1-9 of ¶ [0043]); monitoring the data traffic of the terminal (See Liu e.g. awaking at periodic time to monitor, Page 3, Lines 4-6 of ¶ [0030]); defining at least one parameter describing the data traffic (See Liu e.g. frame body having various parameter, Page 5 ¶ [0070]); and based on the at least one parameter and the beacon interval information (See Liu e.g. station to wake up once per beacon interval i.e. 100 ms, Page 5, Lines 1-2 of ¶ [0065]), dynamically controlling (See Liu e.g. dynamically adjusted to schedule wake-up time, Page 4, ¶ [0045]) the power state of the terminal so that the terminal is maintained in one of at least two power states (See Liu e.g. station can remain asleep an wake up, Page 4, Lines 3-7 of ¶ [0046]), wherein a first power state is an active state and a second power state is a power save state (See Liu e.g. employing power saving technique, Page 2, ¶ [0019], power saving, sleep and awaking (or active sate or mode), Page 3, ¶ [0030]).

Regarding claims 2, 11, 17, Liu teaches the monitoring step includes monitoring packet sizes and packet intervals of the data traffic (See data length, traffic, etc., Page 4, Lines 6-8 of ¶ [0045]). Regarding claim 3, Liu teaches at least one parameter describes packet sizes and packet intervals (See data length, traffic, etc., Page 4, Lines 6-8 of ¶ [0045]).

Regarding claim 4, Liu teaches the controlling step includes determining a sleep interval defining the time periods when the power save state is possible (See Liu e.g. sleep mode until, determine schedule time, Page7, ¶ [0099]).

Regarding claim 5, Liu teaches the determining step includes determining parameters indicating the timing, length and frequency of the sleep interval (See Liu e.g. station enters sleep mode, at the later specified time, Page 6, Lines 1-2 of ¶ [0085]).

Regarding claim 6, Liu teaches the step of supplying additional (inherently) input data including at least one requirement parameter describing requirements set by an application, active in the terminal, for the controlling step (See Liu e.g. QoS requirements , Multimedia, Page 1, ¶ [0004], requirements, application, Page ¶ [0065]).

Regarding claim 7, Liu teaches at least one requirement parameter indicates the maximum period that the terminal may continuously be in the power save state (See Liu e.g. station enters sleep mode, at the later specified time, Page 6, Lines 1-2 of ¶ [0085]).

Regarding claim 8 Liu teaches at least one requirement parameter indicates the Quality of Service (QoS) level required by the application (See Liu e.g. QoS requirements , Multimedia, Page 1, ¶ [0004], requirements, application, QoS, Page ¶ [0065]).

Regarding claim 9, Liu teaches the step of mapping the Quality of Service level to input parameters for the controlling step (See Liu e.g. TIM of the beacon, Page 7, ¶ [0098], beacon frame schedule , schedule power saving, subject to QoS requirements, Page 6, Lines 1-2 of ¶ [0083]).

Regarding claim 12, Liu teaches the power management means (inherently) comprise an interface for applications residing in the terminal (See Liu e.g. PS method 905 - 940 of Fig. 7), thereby to receive additional input data from an application (See Liu e.g. QoS requirements , Multimedia, Page 1, ¶ [0004], requirements, application, Page ¶ [0065]), the additional input data including at least one requirement parameter describing requirements set by the application for the power management means (See Liu e.g. PS method 905 - 940 of Fig. 7).

Regarding claims 13, 15, Liu teaches the terminal is a WLAN terminal or at least system entity is a wireless terminal (See Liu e.g. WLAN, STA, mobile or portable, Page 1, Lines 1-5 of ¶ [0005]).

Regarding claim 16, wherein said at least system entity is an access point connected to a wired network (See Liu e.g. access point, WLAN, STA, mobile or portable, Page 1, Lines 1-5 of ¶ [0005], wired or wireless network, Page 1, ¶ [0008]).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Hernandez (U.S. Pub. No.: 2003/0210658 A1).
- b) Sklovsky (U.S. Pub. No.: 2004/0041538 A1).
- c) Yildiz (U.S. 6,674,738 B1).

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (571) 272-7796. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, **Eng, George** can be reached @ (571) 272-7495. The fax number for the organization where this application or proceeding is assigned is **571-273-8300** for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kamran Afshar/

Examiner, Art Unit 2617